

# Water Quality Law and Silviculture: A Status Update for the South

by  
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## Abstract

Federal and state water quality laws pertaining to silviculture in the thirteen southern states were examined to make sense of what is a confusing body of legislation and voluntary programs. Two federal laws, The Clean Water Act (The Federal Water Pollution Control Act of 1972) and amendments to The Coastal Zone Management Act mandate a variety of actions that affect silviculture. Under The Clean Water Act, these include the development of individual state best management practices (BMPs) as part of area wide planning and enforcement provisions for nonpoint programs (§319); wetlands protections (§404); and total maximum daily load (TMDL) provisions (§303(d)). Silviculture is further addressed under §6217 of the Coastal Zone Act Reauthorization Amendments of 1990. Additionally, the states also address silviculture under their own water quality laws. Finally, downstream users adversely impacted by upstream events may hold "bad actors" liable under nuisance provisions in civil and common law.

## INTRODUCTION

When lawyers say that they are searching for the law on a particular subject, they typically mean that they are searching for enforceable provisions within the law. They are looking for those aspects of the law that allow some private or public legal action, a means of imposing fines or penalties to discourage wrong-doing, or provide a remedy for wrong already done. This paper is a brief examination of the basic provisions of federal and state water quality law that affect silviculture in the South. Accordingly, the primary source materials consulted were the legal statutes that establish federal and state water quality policy. Secondary materials included books and technical papers about water quality. The most extensive original research for this section was performed by students at the Tulane University School of Law and by the director of the Tulane Institute for Environmental Law and Policy.

Understanding water law as it applies to silviculture is perhaps best done by beginning with the federal scheme. What we currently know as the Clean Water Act began with the Federal Water Pollution Control Act of 1972. Two main types of water pollution sources are recognized in the Clean Water Act: point sources, which have an identifiable input site such as a drainpipe; and nonpoint sources which do not. Examples of the latter include farms, forests, cities and municipalities. In 1987, the Clean Water Act was amended, including the establishment of Section 319, which initiated a new scheme for addressing non-point sources, one that relies heavily

on state implementation (with federal grant support).

In addition to the Section 319, Section 303(d), establishing the total maximum daily load program, and Section 404, regulating the discharge of dredge and fill in the waters of the United States, are the remaining sections of The Clean Water Act that have the potential to affect silviculture. Foresters in coastal states should be aware of an additional federal statute, the Coastal Zone Act Reauthorization Amendments, and its Section 6217 that has the potential to regulate nonpoint-source pollution. Lastly, individual states control both point and nonpoint-source water pollution with their own statutes. We begin by looking at federal water law and federal implementation. We next cover state implementation of federal law, and finish with individual state programs.

**Federal Laws, Federal Implementation--** The one facet of nonpoint-source water pollution not delegated to the states is section 404 of the **Clean Water Act**, which has been interpreted as a mechanism to regulate activities in jurisdictional wetlands in the United States. The Corps of Engineers (COE) has primary responsibility for enforcement of section 404; the Environmental Protection Agency (EPA) has veto authority. The COE is authorized to grant (or to deny) individual and general permits for activities that may result in the discharge of dredge or fill materials into the waters of the United States. Section 401 requires states to certify that these permits comply with state

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water law. If the state denies certification, the federal permit may not be issued. Selected activities (normal farming, silviculture, and ranching) are exempted from this permitting process under Section 404(f)(1) provided that the activities are part of established, ongoing operations.

Normal silvicultural activities are defined as timber harvesting, minor plowing, seeding, draining, and cultivation for producing timber. Maintenance of structures and ditches, as well as road construction and road maintenance activities are also exempted from permitting. However, this permit exemption is conditional upon the implementation of 15 federal best management practices (BMPs) for maintaining and constructing roads. Additionally, mechanical site preparation activities require a permit in nine types of wetlands as defined in a 1995 COE memorandum (Burns 1996). Operators are exempted from the permit in other wetland types provided they utilize, as a minimum, the six BMPs for mechanical site preparation practices established in the memorandum.

Under 40 CFR 232.3(c)(1)(ii)(B), the scope of the forestry exemption is limited and "[a]ctivities which bring an area into farming, silviculture, or ranching use are not part of an established operation." In addition, "[a]n operation ceases to be established when the area in which it was conducted has been converted to another use or has lain idle so long that modifications to the hydrological regime are necessary to resume operations." The recapture provision of Section 404(f)(2) further limits the exemption by requiring a permit for otherwise exempted activities that convert a wetland into a new use, where the flow and circulation of waters are impaired or the reach of waters reduced. "A conversion of section 404 wetland to a non-wetland is a change in use of an area of waters of the United States" (40 CFR 232.3(b)). Accordingly, section 403 has the potential to affect both industrial and NIPF owners of forested wetlands depending upon the scope of operation proposed for their property as well as the intensity needed to accomplish management objectives.

**Federal Laws, State Implementation--** In addition to Section 404, the Clean Water Act has two sections pertinent to silviculture: Section 319 and Section 303(d). Section 319 requires state Governors to submit a report to the EPA which:

"identifies those navigable waters within the State which, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain applicable water quality standards."

- "identifies those categories and subcategories of nonpoint sources...which add significant pollution" to those sub-par waters.
- "describes the process...for identifying best management practices" to control those problematic sources, and
- "identifies and describes State and local programs for controlling" nonpoint pollution sources" (33 U.S.C.A. § 1329(a)(1)).

States are also required, "to the maximum extent practicable, [to] develop and implement a management program on a watershed-by-watershed basis" (33 U.S.C.A. § 1329(a)(1)). The Act also provides that if a State fails to submit the report, the EPA is to prepare the report and submit it to Congress. But, beyond that, there are no real sanctions. The principal motivation for states to comply with these requirements is a program of grant funds for the implementation of management programs.

States typically implement a significant part of their nonpoint source pollution programs with those grant funds from the Federal Government under Section 319. Much of the activity in those programs concerns the encouragement of BMPs through educational activities, technical assistance, financial assistance, training, and demonstration projects. Some funds are used for BMP compliance monitoring. For example, South Carolina uses some of its 319 funds for a unique aerial surveillance program that examines the state's major streams on a monthly basis.

The second section of the Clean Water Act with implications for silviculture is the "total maximum daily load" program of Section 303(d) of the Act. Somewhat dormant until a round of litigation beginning in the early 1990s, Section 303(d) requires that states:

- Identify state waters from which point source effluent limitations are not sufficient to achieve water quality standards,
- Determine the total maximum daily loads that would be necessary to bring those waters up to water quality minimums, and
- Allocate those loads among sources in discharge permits and state water quality plans (33 U.S.C.A. § 1313(d)).

Little of that had happened prior to the litigation of the past decade. The outcome of that litigation has

been a series of agreements and court orders that have imposed schedules for the identification or listing process and for the process of actually allocating loads among the various dischargers. Under those agreements and orders, states have as long as 12 years to complete the process (Houck 1999). Clearly, these total maximum daily load provisions hold the potential for significant impact on agriculture generally, and silviculture specifically, but the details are still very much in development--and EPA guidance has argued that voluntary measures will be the "primary implementation mechanism." In South wide, silviculture appears to be a minor contributor to the problems of the waters that have been listed to date.

The Coastal Zone Act Reauthorization Amendments is another interface between federal and state law with potential impacts on silviculture. In passing the Act to amend the Coastal Zone Management Act in 1990, Congress added Section 6217 (16 U.S.C. § 1455b), which requires states with federally approved coastal zone management programs to:

- Prepare a Coastal Nonpoint Pollution Control Program that includes management measures to restore and protect coastal waters from the adverse impacts of polluted runoff:
- Coordinate and integrate the state coastal zone management program with existing state and local water quality plans and programs, particularly the state nonpoint source management plan, and
- Implement polluted runoff management measures that are consistent with the U.S. EPA's (1993a) "Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters."

State plans under §6217 are voluminous. To date, their impacts on silviculture do not appear to be great, though the programs are still new.

### State Water Quality Laws

Water quality laws affecting silviculture vary among the states. Typically, a state's water law will prohibit "pollution" (variously defined) of a state's waters, except as it is allowed under the control of a state-issued permit. Silviculture is usually subject to the general prohibition, but it is often specifically exempted from the permitting requirement. Further, many states' laws only make the prohibition against pollution enforceable against silviculture operations if the conduct causing the pollution rises to a certain

level of culpability, at least "negligence." But the implementation of BMPs by a silviculture operator typically serves as proof that the operator has exercised "due diligence" or, at least, the standard of care of an ordinary person, thus defeating any legal finding of negligence. Generally, however, the implementation of BMPs will not protect against private lawsuits brought by neighbors or downstream persons who can demonstrate that they have been harmed and quantify that harm in monetary terms.

In the South, forestry BMPs are most often voluntary, but they are mandatory in a few states and in some special circumstances, such as for previous violators or around waters of special concern. In some states, counties have made BMPs mandatory. Typically, there are no preharvest notification requirements, and government agencies are only able to enforce BMP or water quality requirements by searching out active harvesting operations. If violations are found, there is often a two-or-more step process of trying to remedy the problem with education or technical assistance before sanctions are imposed.

Variations on the typical pattern include:

- A "noticed general permit" system in Florida, handled by five strong regional water management districts, with some pre-notification requirements.
- Kentucky's Forest Conservation Act, which requires a master logger on site and mandates BMPs.
- Mandatory BMPs in some sensitive areas (and some counties) in Georgia.
- "Courtesy BMP exams" in South Carolina. Exams typically result from aerial surveillance, and can affect an operator's market by publishing information that the operator has "failed an exam."
- Virginia's system that authorizes the State Forester to issue stop-work orders to prevent water pollution.
- Tennessee's program that (a) makes BMPs mandatory for operators who have previously been found responsible for water pollution and (b) requires pre-harvest notification for 2 years after an operator has been found guilty of a violation.

### CONCLUSION

In sum, water law as it affects silviculture, though driven by the mandates of the federal Clean Water

Act. is primarily a matter of state enforcement and technical assistance activity, supported by federal grants under the \$3 19 program.

State water pollution laws are the backdrop for regulation, but silviculture is exempt from the permit requirements of those laws in every state studied. BMPs play a major role. In most states, enforcement actions only begin after a water quality violation--but several attempts at cooperative correction (technical assistance, education, etc.) are typically made before fines or other sanctions are levied. Kentucky is unique among the states in the region in making BMPs mandatory statewide and in enforcing that BMP requirement without waiting for a water quality violation. Some states make BMPs mandatory in special circumstances, such as in the vicinity of scenic rivers, for recipients of cost-sharing programs, or for previous violators. In at least two states (Georgia and Texas), the implementation of BMPs will protect operators from fines even if water quality violations occur.

Both the TMDL requirements of the Clean Water Act and the requirements under §6217 of CZARA have significant potential for impacting silviculture. Those impacts have not been substantial to date, but the loadings allocation process under the TMDL program is still in its infancy, and CZARA plans are still in development and under scrutiny by NOAA and EPA, particularly with regard to requests for exemptions for silviculture in several states.

An issue that surfaced repeatedly in the course of this research was that of pre-harvest notification. To evaluate levels of BMP compliance, some state agencies are placed in the position of having to search for active harvest operations in order to monitor their performance concerning the protection of surface waters, or conduct their monitoring operations months or years after the job has been finished. A few states have notification requirements in limited circumstances (near scenic rivers and for previous violators, for example). Virginia has a requirement, but no penalty for failure to observe it.

The argument in favor of such notification is perhaps best expressed by the North Carolina Department of Environment, Health, and Natural Resources in the forestry volume of its proposed North Carolina Coastal Nonpoint Pollution Control Program, when the document was submitted in July

1995: "A voluntary system to notify the Division of Forest Resources immediately prior to the onset of site-disturbing forest activities is needed to provide environmental and administrative efficiency benefits: Administrative benefits would accrue to the Division of Forest Resources, as that agency would have more information to indicate where technical assistance and compliance audits should occur: compliance monitoring could be targeted to areas at high risk for water quality damage. Water quality management would be improved. Prior notification would provide data to managers indicating where site-disturbing activities are occurring on the landscape in relation to receiving water bodies and the condition of those waters. Notification would also provide data on the size and type of forestry activities, which would help in estimating pollutant loading and delivery from those activities."

South Carolina has an elaborate, impressive, and expensive substitute for pre-harvest notification--locating active sites by aerial surveillance, followed by a search of land records to identify landowners, followed by a request for access to the property. Interestingly, that access has been denied only six times in four years. These data suggest that a simple requirement for pre-harvest notification would accomplish the same end as the aerial surveillance and a records search--with enormous increases in efficiency and only a handful of objections. Such a requirement coupled with significant offers of technical assistance and a strong program of regulatory and market encouragement (like South Carolina's publicizing of "failures") could bring significant enhancements to the management of water quality issues associated with silviculture.

Forest management activities in the South are coming under increased scrutiny, partly for social reasons, but partly because the overall regulatory regime for forestry is perceived by environmental activists to be more lenient than those in other regions of the United States. Despite the fact that silviculture is a minor contributor in terms of the overall sources of nonpoint-source pollution, the confusing mix of federal law, state implementation, permit exemptions, and voluntary BMP programs, is drawing its own share of this increased scrutiny. Members of the forestry community should be aware of this trend and have an understanding of how water quality law and silviculture interact.